

S. Hashemi

Re-run

1637



RECEIVED
JUL 12 2002
ENTER 1600/2900

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/692,257A

DATE: 07/09/2002

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

C-->

ENTERED

1 <110> APPLICANT: Miller, Philip W.
 2 Peng, Ming
 3 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 4 Plants
 5 <130> FILE REFERENCE: 38-21(15771)B
 6 <140> CURRENT APPLICATION NUMBER: US/09/692,257A
 7 <141> CURRENT FILING DATE: 2000-10-19
 8 <150> PRIOR APPLICATION NUMBER: US 60/162,747
 9 <151> PRIOR FILING DATE: 1999-10-28
 10 <160> NUMBER OF SEQ ID NOS: 14882
 12 <210> SEQ ID NO: 1
 13 <211> LENGTH: 488
 14 <212> TYPE: DNA
 15 <213> ORGANISM: Zea mays
 16 <220> FEATURE:
 17 <223> OTHER INFORMATION: Clone ID: LIB3136-003-D6-F1A
 18 <400> SEQUENCE: 1
 19 cctaaaaata gtttcgtata tatccggatc tggattata atagtaacac gtgttttgtt 60
 20 gtggtacaaa taatacgtcc cgagtcggat aaatcttccg atctccaata acagtgtacg 120
 21 tacatacctg catggcacga aattatgcag ttcacatcatgg actggaacgg agcgggtgtgt 180
 22 aaaagcgagc gcgctactgg taataatagc gtactgctgg gggggtatct tggctggctg 240
 23 catccaattc caacaacaat gatgtggtgt tgggtggtggc tacggaagga cggggggtgc 300
 24 caccggcgag gtgttggtggg actggcagtg gcagcacttg tggcccgcca cgccggagaa 360
 25 gacctgcgtc gtgtccctgc agtcgttgca cacgacccat ccctttcccg tgtacaagta 420
 26 gcttgccctc atctctgcgt cgagggcctt gaagaacttg tccatgtcga agatgggcgt 480
 27 ggcgcata 488
 29 <210> SEQ ID NO: 2
 30 <211> LENGTH: 466
 31 <212> TYPE: DNA
 32 <213> ORGANISM: Zea mays
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: Clone ID: LIB3136-003-D6-R1A
 35 <400> SEQUENCE: 2
 36 cggacgctgg atcctgcccc gccaccacgc cgcggcacac aactgcacaa gccctcctca 60
 37 gatctcaatc ccggcgctcc ctccctccct cctcctcgc ctcgggacag cgagcgccgc 120
 38 cgtccgccgt ccatggagca cgacgccgag gcgcgccgcg ggttcgccag gatgggcttc 180
 39 ggggtgcaagc actaccggag gcgatgccgg atccgcgcgc cctgctgcgg cgacgtcttc 240
 40 cactgccgcc attgccaaa cgagtcacag aaagacgggc acgagctgga tcggcacgac 300
 41 gtccaatcgg ttatctgcct cgtctgtgac accgagcagc cgatcgcgca ggtgtgctgc 360
 42 aactgcggcg tctgcatggg ggagtacttc tgcgcacctg caacttcttg gacgatgacg 420
 43 ttgacaagga gcagttccat tgccacgatt gcggcatctg cagagt 466
 45 <210> SEQ ID NO: 3
 46 <211> LENGTH: 486

RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

47 <212> TYPE: DNA
48 <213> ORGANISM: Zea mays
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Clone ID: LIB3136-018-G10-F1A
51 <400> SEQUENCE: 3
52      ccattataac agccataaat atttttgttta aatgcaggga gacaaattcc agggattatt      60
53      tactgcagca gcagtttaca gggaccgcca tcttctcttc caccctccaac accccccccac      120
54      cactttccca ggtgaaatgg caaaatttttc ccaacccaaaa aacgcatagt aaaaaccaat      180
55      cgggtaaatg atcttgcgac cgatcgaatg gacatggaac atgggtgtgt cgcctttgtt      240
56      cggtttcagg ctttcaatgc ggtgttcttg cagatggggc acacgttctt caccaccagc      300
57      cattgcttga tgcagccagc atggaagtgc tgcccgagc ccagcctccc gagatcgtct      360
58      ccatcaacgt actcctcctg gagagcgaga aagagcatga gtatgtatta gccttgttca      420
59      actgctaact tcattgcttt gtaacaaagc taggtgatgc agggagcatg ttcacaggcg      480
60      gaaagc                                         486
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 472
64 <212> TYPE: DNA
65 <213> ORGANISM: Zea mays
66 <220> FEATURE:
67 <223> OTHER INFORMATION: Clone ID: LIB3136-018-G10-R1A
68 <400> SEQUENCE: 4
69      gcaggattca atcaccaaaa cctcaccaga cgccatcctc gaaattttatc agaggtaatt      60
70      ttctccctcc atttttcgca ttttgttttc tccgtttttt ggttttcagt ttgattgctc      120
71      atcttttcac caaaatatca agtagcgta tacttgaaat ttgattgac atcttctcga      180
72      ttgtatcttt tattttctta taggagattg gtcgtctatc tggagcactc cgcggccatc      240
73      aacccccacg cttaagggtca gggtttctgt tggagcgta gggcgatggt gtttggggcg      300
74      ttcctttatc aacaaggggt agagaaggaa gaaggttaat ggagattcgg aatgcaactg      360
75      aaatgattca aaggggggaa aatgtaaggc tcgagtctat cttctatggc ggcctcgaca      420
76      ttcatgacag acacagggac atgcgccttg acattgacaa tatgtcctat ga          472
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 498
80 <212> TYPE: DNA
81 <213> ORGANISM: Zea mays
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Clone ID: LIB3136-023-C2-F1A
84 <400> SEQUENCE: 5
85      tttttatttt tttttttttt tttttttttt ttttaatgac aatgaacaca attattcctt      60
86      gtcgattgaa caatagttta catcatggta caaactgaaa accagcgtgc gctcacatgc      120
87      atccggacac ctaaaaggta ccggcggcgc ctccctcact tgccggggac gaagtgtgtg      180
88      gcgtaggccc aagcgttggt gttgacgggg tcggcaatgt ggtcagcgag gttctcgagc      240
89      gggcccttcc cgttgacgat ggctggacg aagaatccga acatggagaa catggcgagg      300
90      cggccgttct tgagctcctt caccttgagc tcggcgaaag cctcggggtc gtcggcgagg      360
91      ccgagcgggt cgaagctgcc accggggtag agcgggtcga cgacctcgcc gagcggaaccg      420
92      ccggcgatgc ggtaccctcg acggcgccca tgagcacgac ctggcaggcc cagatggcaa      480
93      ggatgctctg cgcgtgga                                         498
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 472
97 <212> TYPE: DNA
98 <213> ORGANISM: Zea mays

```

RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

99 <220> FEATURE:

100 <223> OTHER INFORMATION: Clone ID: LIB3136-023-C2-R1A

101 <400> SEQUENCE: 6

| | | | | | | | |
|-----|------------|------------|------------|------------|------------|-------------|-----|
| 102 | cgatctgcaa | gtctcgctac | gtagcagtg | aatacaaaaa | aagcagccgc | aatggcgagc | 60 |
| 103 | agcaccatgg | ccctctcctc | cacggccttc | gccggcaagg | ccgtgaacgt | gccgtcgctc | 120 |
| 104 | tccgccttcg | gcgaggcccg | cgtgacgatg | cgcaagacgg | cggcgaaggc | caagcctgcg | 180 |
| 105 | gcggcgctcc | ggagcccgtg | gtacggcccc | gaccgcgtgc | tgtacctggg | cccaactgtcc | 240 |
| 106 | ggcgagccac | cgagctacct | gacgggcgaa | ttccccggcg | actacggctg | ggacaccgcg | 300 |
| 107 | gggctgtcgg | cggacccgga | gacgttcgcc | aagaaccggg | agctggaggt | gatccactcc | 360 |
| 108 | cgctgggcca | tgtctgggcg | gctcggctgc | gtcttccccg | agctgctcgc | ccgcaacggc | 420 |
| 109 | gtcaagttcg | gcgaggccgt | gtggttcaag | gccggctccc | agatcttcag | cg | 472 |

111 <210> SEQ ID NO: 7

112 <211> LENGTH: 417

113 <212> TYPE: DNA

114 <213> ORGANISM: Zea mays

115 <220> FEATURE:

116 <223> OTHER INFORMATION: Clone ID: LIB3136-026-B3-R1A

117 <400> SEQUENCE: 7

| | | | | | | | |
|-----|-------------|------------|------------|------------|------------|------------|-----|
| 118 | cccacgcgtc | cgactagttc | tagatcgcca | tctaggacta | gtctgaagat | ccatgttctg | 60 |
| 119 | tctgccttga | taatccttct | gtgggtgata | gtatccgcca | tttgccttgc | tttcacaagt | 120 |
| 120 | tccataaaga | gtgtattgac | gagtggctta | ggagaaagaa | actgtgcca | gtctgcaagt | 180 |
| 121 | ttgggattaa | ctgaagtttg | ccgtaccatt | ctacagtggg | gttctactta | gtagtggcat | 240 |
| 122 | cgacgaggtg | ctgcaatttc | tcatacggga | tgccttcctg | cagggaattg | gctgtgtcta | 300 |
| 123 | agataaaaata | aacaatgtat | tgctatgatc | tgcgcttttg | ggcatcattt | tgtatgcacg | 360 |
| 124 | cacgagtgtc | tgcgaggact | attatcgtaa | accaccaatt | cccataaatt | ggttacc | 417 |

126 <210> SEQ ID NO: 8

127 <211> LENGTH: 408

128 <212> TYPE: DNA

129 <213> ORGANISM: Zea mays

130 <220> FEATURE:

131 <223> OTHER INFORMATION: Clone ID: LIB3136-033-F7-F1A

132 <400> SEQUENCE: 8

| | | | | | | | |
|-----|-------------|------------|------------|-------------|-------------|------------|-----|
| 133 | ctacgttcac | atatgtattt | taagcaggct | catgggcctt | tatcctcccc | ttactttaca | 60 |
| 134 | acataattcaa | gaatcgggga | aacaaaacca | tgcgtttttt | caatccgtat | gaaatgcttc | 120 |
| 135 | atcgtaaaaca | gcagtggcgg | tgtggctggc | ggaaacgcct | gatcgggtcaa | ggtttcagaa | 180 |
| 136 | accaagggtcg | tcgttagggc | cgggaccctg | accaccacaga | ggggggccacg | gaagtcggga | 240 |
| 137 | ggatccggac | ccggggcata | cgaggtacgg | aaaatccggg | agccccctcg | gtttcagggg | 300 |
| 138 | ttggagtgtc | cgaaacggcg | gtatttgcag | tagcgggagc | cgcaacggga | gcagttcacc | 360 |
| 139 | aaatcctgcc | gaaccggggc | gtagcttatg | ggccctaagg | tgtataac | | 408 |

141 <210> SEQ ID NO: 9

142 <211> LENGTH: 378

143 <212> TYPE: DNA

144 <213> ORGANISM: Zea mays

145 <220> FEATURE:

146 <223> OTHER INFORMATION: Clone ID: LIB3136-033-F7-R1A

147 <400> SEQUENCE: 9

| | | | | | | | |
|-----|------------|------------|------------|------------|------------|------------|-----|
| 148 | acaagggaaa | gattgcgctt | gcgcagtctt | gggcgcgggc | cgcgaggtg | ccggttaatc | 60 |
| 149 | ttcgagagac | gcgagtcacg | cgactgctg | aagagtcaaa | aaggtgtgtg | tgtgtgagat | 120 |
| 150 | agagatgagg | ctccctatcc | tctcgcggta | acttggctag | gagagatagg | ggctgggaaa | 180 |

RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

151      gcgaatggtt ttccgggaagg cgctgtgatt tgacctgtaa aggaagaacc ttcccttcct 240
152      cttcccgtcc ttgtccgact cttgtaccgc cctcagatcg gcgacgcggt tgtttcttcg 300
153      gcaacgggct aaaatgaggc tctcatcgtc gtccggcagc gtcctaccgg ctcagccggg 360
154      ctctccggaa gctgtgga                                     378
156 <210> SEQ ID NO: 10
157 <211> LENGTH: 485
158 <212> TYPE: DNA
159 <213> ORGANISM: Zea mays
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Clone ID: LIB3136-044-H10-F1A
162 <400> SEQUENCE: 10
163      caaaacaaaa caactcaaat cctttattat ttggaccatt attccagaac gagaagggat 60
164      ggcgtctcct ttttgatcac ccattccctca caaaaggggt aacatcaaag tacatacaaa 120
165      aaaccataaa gagaaaaaaa gtcaagagaa aaaaaaaatg tgcggggcga atgggatcaa 180
166      cagccctctg ataattggagc ctaccacaaa tcacgtagaa gatatatggc tggctggcat 240
167      caagatctac ggggtgcggcg aaaacagagg aggacaagac gatcaacgga gtgattagct 300
168      tggcactaat aatccgcccc aatcacaaaga tcacacaacc ctgagatagg cctgcaatcg 360
169      ttccggcagtc actgtgcagg gggtagcttg tatgtacact gctgatctgg cgttggaggg 420
170      tccttatcca tgaagcaacg tggatgtggg cgaagaagat aggggtcatca gcagcagagc 480
171      agcct                                     485
173 <210> SEQ ID NO: 11
174 <211> LENGTH: 489
175 <212> TYPE: DNA
176 <213> ORGANISM: Zea mays
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Clone ID: LIB3136-055-C12-F1A
179 <400> SEQUENCE: 11
180      aatagaacag cacacagtat gttatatata tagcctgac tacacataca gccgcatgct 60
181      gtatatacat acacacacgg caaaaaaacac acacacatgc cccacccgtt catccttggt 120
182      atggaacaaa aaaatgtaag atgcggcata aaacacacat gttataagtt ccatactaca 180
183      atgggcaaaa ctggaggggc gcagagaata aagaaaaagg cgcataaact tgcaacatgt 240
184      cggtcgagca aaccaagcta tcctaaagct gcttattaag atatattgtac atacgcatcg 300
185      ccttgctcct gagtgtgacg actccaaacg accttcttgc cttcaggcca gccagctgct 360
186      tctctcactt gctcgttatc atgaacggga gatgaacccg ggaagagccc gacttttgat 420
187      ccatgcttga ggcattccgaa gagagcaacc tcctatgctc cctcaaagtt ggactagttt 480
188      aggggtgatg                                     489
190 <210> SEQ ID NO: 12
191 <211> LENGTH: 474
192 <212> TYPE: DNA
193 <213> ORGANISM: Zea mays
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Clone ID: LIB3136-055-C12-R1A
196 <400> SEQUENCE: 12
197      cggacgctgg tcgcacggca gccgatggtg tcgatgagct cgacgccgca ccctctggat 60
198      ccgtccgtcc cgcccgctcg ggggtacggc aaggaggagg aggaggcggt ggagtccttg 120
199      gccgccgccg cgcccttgcc gccggttggg atcgacgacg acgaggaggg cccccggaga 180
200      gtgcgcaacc ctacaccatc accaagtcgc gcgagagctg gaccgacccc gagcacgaca 240
201      agttcctcga ggcaactgcg ctctttgacc gtgactggaa aaagattgaa gcatatgttg 300
202      gctccaagac agtaatacag attaggagtc acgcacagaa gtactttttg aaggttcaaa 360

```

RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

203      agaattggaac aggtgagcat ttgccccac ctaggccaaa gcgaaaggct gcccatccat 420
204      atccacacaa gtcctcaaaa aaggcccttc aagttgtctt accacaacaa gttt 474
206 <210> SEQ ID NO: 13
207 <211> LENGTH: 364
208 <212> TYPE: DNA
209 <213> ORGANISM: Zea mays
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D5
212 <400> SEQUENCE: 13
213      ttgccccctg taccttattc atctggggcc tctactatta gttcgagact cggcgctttt 60
214      cttgggtgtg gatctatcaa agcaacattt gctttggtat ggttatgatc gcaagaatgg 120
215      agttcattcc ctctgtccag ctatatggtc aaatcatagg agatggctga tgatgtcaat 180
216      gatgtgtctc aatccaatat cttgttcgtt tatggatctg cattttccta ttgggcaact 240
217      aacatatgtt gcttggtgaa ggaatataac ccgtggcttt ctcccttat ttggtggctt 300
218      gcttcaagcc taatggaata tttccctgta gaaccaaata atgattcttt tctttgcata 360
219      aata 364
221 <210> SEQ ID NO: 14
222 <211> LENGTH: 334
223 <212> TYPE: DNA
224 <213> ORGANISM: Zea mays
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D6
227 <400> SEQUENCE: 14
228      caccactccc aagccagtac cgagtcctac gagcagtcgc acgcaagtgt caagagacga 60
229      aacggtcgac atggctcgca cgcaatctgc cgtagcggtc gccgtgggtg ccgcggtgct 120
230      gctgctggca gcggcggcga cgacctcgga ggccgccatc acctgcgggc aggtgagctc 180
231      cgccatcgcg ccctgcctct cctacgcccg cggcacgggg tccgccccct ccgcgtcctg 240
232      ctgtagcggc gtcaggaacc tcaagagcgc cgccagcacc gccgccgaca ggcgtgccgc 300
233      ctgcaactgc ctcaagaacg ccgccagggg cgtc 334
235 <210> SEQ ID NO: 15
236 <211> LENGTH: 358
237 <212> TYPE: DNA
238 <213> ORGANISM: Zea mays
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D7
241 <400> SEQUENCE: 15
242      ctgaggccct tgagattacc cgcaagttca tgaacaaacc agtgagaatt cttgtgaaga 60
243      gagatgagct gacccttgag ggtatcaagc agttctatgt gaatgtggac aaggaagact 120
244      ggaagctgga cacactgtgt gacctgtatg agaccctggc cattaccag agtgtcatct 180
245      ttgtcaacac ccgccgcaag gtggactggc tctactgaaa gatgaggagc agggaccaca 240
246      ccgtttctgc cactcatggt gacatggacc agaacactag agacatcatc atgagggagt 300
247      tccggtctgg ctccctccgt gtgctcatca ccactgacct gcttgctcgt ggtattga 358
249 <210> SEQ ID NO: 16
250 <211> LENGTH: 304
251 <212> TYPE: DNA
252 <213> ORGANISM: Zea mays
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D8
255 <400> SEQUENCE: 16

```